

MEMORANDUM

To: Valmichael Leos and Barbara Nann
U.S. Environmental Protection Agency

Date: May 8, 2013

From: John Laplante, John Verduin, Wendell Mears,
and David Keith, Anchor QEA

Project: 090557-01

Cc: Gary Miller, USEPA
Philip Slowiak, IP
David Moreira, MIMC

Re: Post-TCRA Quarterly Inspection Report - April 2013 Inspection

Introduction

This document reports the results of the April 2013 quarterly inspection of the armored cap cover, fencing, and signage installed for the Time Critical Removal Action (TCRA) at the San Jacinto River Waste Pits Superfund Site (TCRA Site).

Background

The TCRA was implemented by International Paper Company (IP) and McGinnes Industrial Maintenance Corporation (MIMC) under an Administrative Settlement Agreement and Order on Consent (AOC) with the U.S. Environmental Protection Agency (USEPA) – Docket No. 06-12-10, effective May 17, 2010. A full description of the TCRA implementation is provided in the associated project documentation:

- Removal Action Work Plan (RAWP; Anchor QEA 2010, 2011)
- Revised Draft Final Removal Action Completion Report¹ (RACR; Anchor QEA 2012)

The inspection summarized in this report was conducted in accordance with the schedule established in the Operations, Monitoring, and Maintenance (OMM) Plan (Appendix N of

¹ David Keith, the Respondents' the Project Coordinator, received a RACR (in the form it was issued by USEPA) from Valmichael Leos via email on August 15, 2012; the appendices to the RACR were not provided to Dr. Keith as part of the document, and are assumed to remain unchanged from the appendices that had been provided by Respondents to USEPA. Respondents reserve all rights related to the changes made by USEPA to the Revised Draft Final RACR, submitted by Respondents to USEPA on March 9, 2012.

the RACR – Anchor QEA 2012)². The OMM Plan specifies the timing, pertinent items, tolerances, and procedures for inspection, maintenance, and repair of the armored cap protective cover, fencing, and signage installed for the TCRA Site (Figure 1).

Monitoring

The purpose of this report is to document the April 2013 quarterly inspection of the armored cap cover, fencing, and signage installed as part of the TCRA, as well as corrective actions taken (if any), following the inspection. The inspection began on April 9, 2013 and was completed on April 17, 2013. Our inspection included evaluation of the TCRA elements referenced below:

- Visual inspection of the security fence and signage surrounding the TCRA Site.
- Visual inspection of the armored cap located above the water surface.
- Visual confirmation that waste materials are not being actively eroded into the San Jacinto River.
- Collection of hydrographic and topographic survey data of the armored cap to compare the current elevations with the survey performed during the January 2013 quarterly inspection and the subsequent TCRA maintenance event.

Visual Inspection

The visual inspection included observing the current conditions of the perimeter fence, warning signs, and the portion of the armored cap visible above the water line of the San Jacinto River. Figure 2 displays the location of the perimeter fence and the stand-alone signs around the armored cap (additional signs are affixed directly onto the perimeter fence). The visual inspection was performed on April 10, 2013. Photographs of conditions observed during the visual inspection are provided in Appendix A.

A summary of each facet of the visual inspection is provided in the following sections.

Armored Cap

Photographs of the armored cap from the inspection event are provided in Appendix A.

² The OMM Plan was attached to the Draft Final RACR, submitted to USEPA on November 22, 2011, and authorization to implement the OMM Plan was contained in an email from USEPA dated January 18, 2012. The OMM Plan was also attached as an appendix to the Revised Draft Final RACR submitted to USEPA on March 9, 2012, which USEPA then revised and issued without reference to any changes to the appendices.

All portions of the armored cap that were visible during the inspection were observed to be intact, with no breaches or other damage. No movement or erosion of waste materials into the San Jacinto River was observed at any location during the visual inspection.

Perimeter Fencing

The perimeter fencing (Figure 2) on the west and east banks of the San Jacinto River was visually inspected for breaches or other signs of damage on April 10, 2013. The inspection team paid close attention to the fencing on the west bank on the south side of I-10 where previous breaches had occurred. No breaches or other signs of fence damage were observed during this inspection for any of the three sections of the fence: the east bank, the west bank on the north side of I-10 or the west bank on the south side of I-10.

The portion of the fence installed along the south boundary of the San Jacinto River Fleet (SJRF) property is not included in the fencing inspection, as the SJRF property is currently an active facility that conducts daily security checks, as required by the U.S. Coast Guard and Transportation Security Administration, for an active maritime fleeing area.

Signage

“Danger” and “No Trespassing” signs are posted at regular intervals on the perimeter fencing surrounding the TCRA Site. These signs were observed to be in place during the April 10, 2013 inspection. Representative photographs are included in Appendix A.

A total of fifteen “Danger” and “No Trespassing” signs were installed at the TCRA Site around the perimeter of the land portion of the TCRA Site; the signs are mounted on steel posts and set in concrete pads. These signs were observed to be in place during the April 10, 2013 inspection. Representative photographs are included in Appendix A.

Three USEPA Public Notice signs are present around the TCRA Site located: 1) near the gate entry point for the perimeter fence north of I-10; 2) near a gate entry point south of I-10; and 3) at the end of the TxDOT right-of-way north of I-10 near the San Jacinto River. These three signs were observed to be in place and undamaged. See Appendix A for representative photographs.

Table 1 summarizes the condition of the TCRA Site signage described in this section.

Table 1**TCRA Perimeter Fencing and Sign Inspection Punch List**

| Task | Status | |
|---|-----------|-----------|
| | Completed | Date |
| Perimeter Fence Visually inspect the perimeter fencing on the east and west sides of the San Jacinto River. | Yes | 4/10/2013 |
| "Danger" and "No Trespassing" Signs Visually inspect the 15 signs to verify that they remain in place. | Yes | 4/10/2013 |
| USEPA Public Notice Signs Visually inspect the 3 signs to verify that they remain in place. | Yes | 4/10/2013 |

Surveys

Portions of the armored cap above the water surface or at a water depth too shallow to access by boat were surveyed using land-based topographic survey techniques. A bathymetric survey was performed for the portions of the armored cap below the water surface and accessible by boat. The surveyor followed the track line spacing, measurement intervals, and accuracy requirements detailed in the OMM Plan.

Survey Tolerance Requirements

The OMM Plan requires that each survey be compared with the prior completed survey using the following criteria:

1. Areas with elevations that are within 6 inches of the previous survey require no action.
2. Contiguous areas with elevation changes exceeding plus or minus 6 inches triggers a review of the survey benchmarks for accuracy or movement.
3. Areas where surveyed elevations are 6 inches higher or lower than the prior survey for a contiguous area larger than 30 feet by 30 feet will require probing to measure the cap thickness.

Survey Results

The survey for this quarterly inspection event was conducted by Hydrographic Consultants, Ltd. Hydrographic survey data was collected on April 9, 2013 and upland topographic data

was collected from April 9, 2013 to April 15, 2013. The topographic work occurred over several days because the seasonal frontal systems passing through the area hampered survey efforts. Figure 3 displays the results of the completed survey.

This survey dataset was compared to the dataset from the previous quarterly inspection survey³ to evaluate the differences in the top of the armor cap elevation between surveys. These differences are shown on Figure 3. The survey results indicate there appears to be a substantial amount of new material being deposited on the surface of the armored cap, as may be expected in a fluvial system like the San Jacinto River. These results are also consistent with visual observations of the Eastern Cell during the January 2013 visual inspection during an extremely low tide event.

A small area in the intertidal zone was not safely accessible by either topographic or bathymetric methods (Figure 3) in the January 2013 survey, so a comparison between the January 2013 and the current survey dataset is not possible for that specific area. Seasonally high tides with south winds during the current survey period allowed a safe survey of this small intertidal area, and comparison of the October 2012 survey data with the current dataset indicates that changes in elevation of the armored cap have not occurred in this area between the two survey events.

Manual probing of armored cap thickness is required at areas identified by the topographic or bathymetric surveys as more than 6 inches lower in elevation than during the prior survey over contiguous areas of 30 feet by 30 feet. When the April 2013 hydrographic survey was compared to the January 2013 survey, the results indicated that additional probing was not required in connection with this April 2013 inspection. No probing was conducted as part of the April 2013 inspection.

Repairs to TCRA Construction Elements

There were no TCRA construction elements identified as deficient or damaged during this inspection event; therefore, no repairs were required in response to the April 2013 armored cap inspection.

³ Hydrographic Consultants, Ltd. conducted the previous quarterly inspection survey; that survey event was completed January 30, 2013.

Inspection Summary

The visual inspection event on April 10, 2013 did not identify damaged or otherwise deficient areas in the perimeter fence or signage.

No deficiencies were identified by the topographic or bathymetric surveys. With regard to the armored cap survey, the small areas identified as increases and decreases in elevation can be attributed to the horizontal and vertical accuracy of the survey, minor shifts in track line location from the baseline survey, elevation data recorded in the crevices between rock surfaces, or other related measuring inaccuracies. The potential for these inaccuracies to exist was confirmed by the surveyor after reviewing the data collected hydrographically during this inspection versus the walking surveys taken in January 2013 during an extremely low tide event.

List of Figures

Figure 1 - Vicinity Map

Figure 2 – Fence and Warning Sign Layout

Figure 3 – April 2013 Quarterly Inspection Survey

List of Appendices

Appendix A – Inspection Photographic Log

References

Anchor QEA, LLC (Anchor QEA), 2010. *Removal Action Work Plan*, San Jacinto River Waste Pits Superfund Site. Prepared for U.S. Environmental Protection Agency (USEPA) Region 6 on behalf of McGinnes Industrial Maintenance Corporation and International Paper Company. November 2010.

Anchor QEA, 2011. *Removal Action Work Plan*, San Jacinto River Waste Pits Superfund Site. Prepared for U.S. Environmental Protection Agency (USEPA) Region 6 on behalf of McGinnes Industrial Maintenance Corporation and International Paper Company. Revised February 2011.

Anchor QEA, 2012. *Revised Draft Final Removal Action Completion Report*, San Jacinto River Waste Pits Superfund Site. Prepared for McGinnes Industrial Maintenance

Corporation, International Paper Company, and U.S. Environmental Protection Agency (USEPA) Region 6. Revised March 2012.

USEPA, 2010. *Administrative Settlement Agreement and Order on Consent for Removal Action*. U.S. Environmental Protection Agency Region 6 CERCLA Docket No. 06-12-10. In the matter of: San Jacinto River Waste Pits Superfund Site Pasadena, Harris County, Texas. International Paper Company & McGinnes Industrial Management Corporation, Respondents.

FIGURES

T:\CAD\Projects\0557-McGinnes Industrial Maintenance Corp\San Jacinto Waste Pits\Quarterly Inspection Reports\2013-04\0557-QIR-001.dwg Vicinity Map

May 06, 2013 3:35pm dholmer

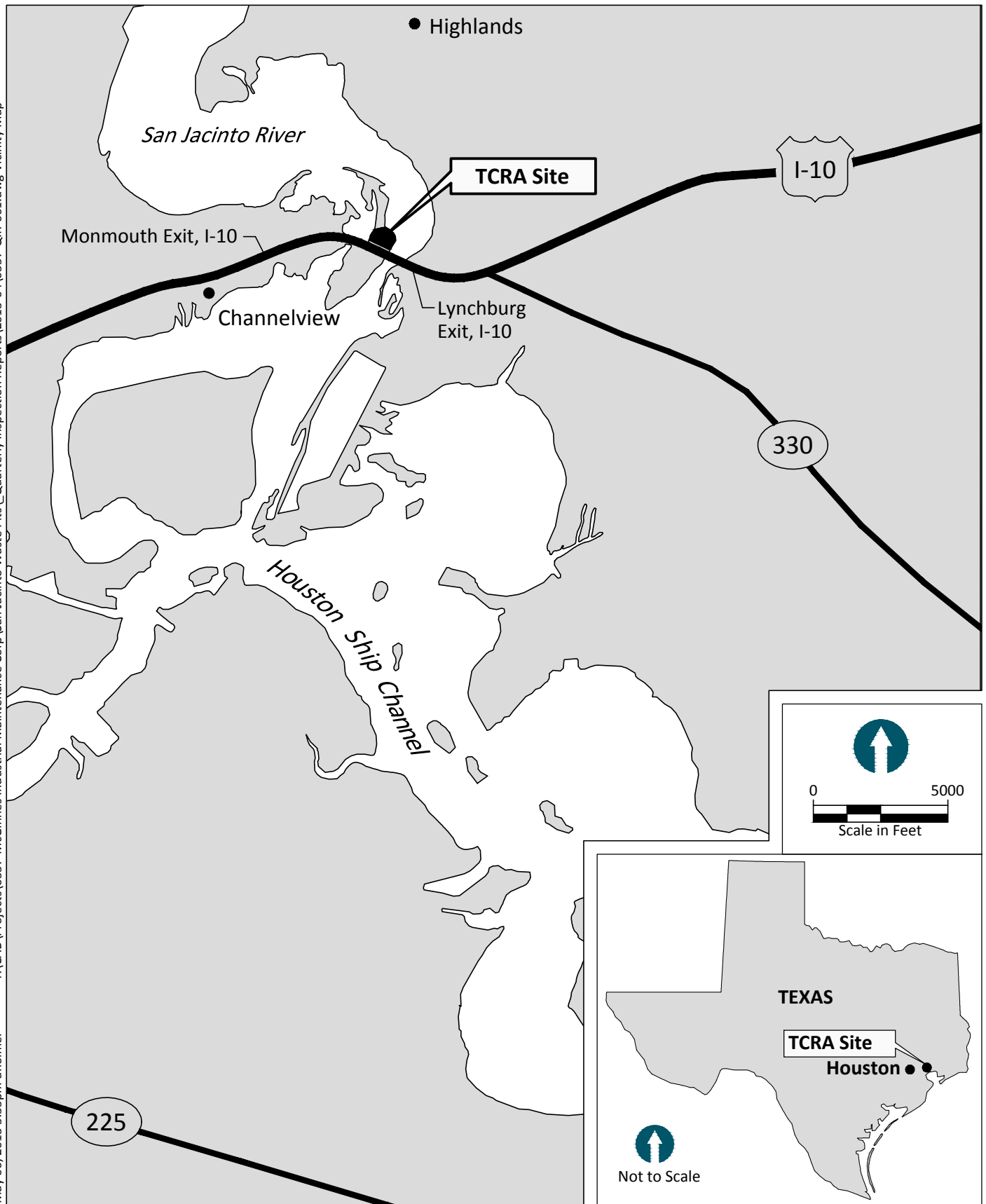
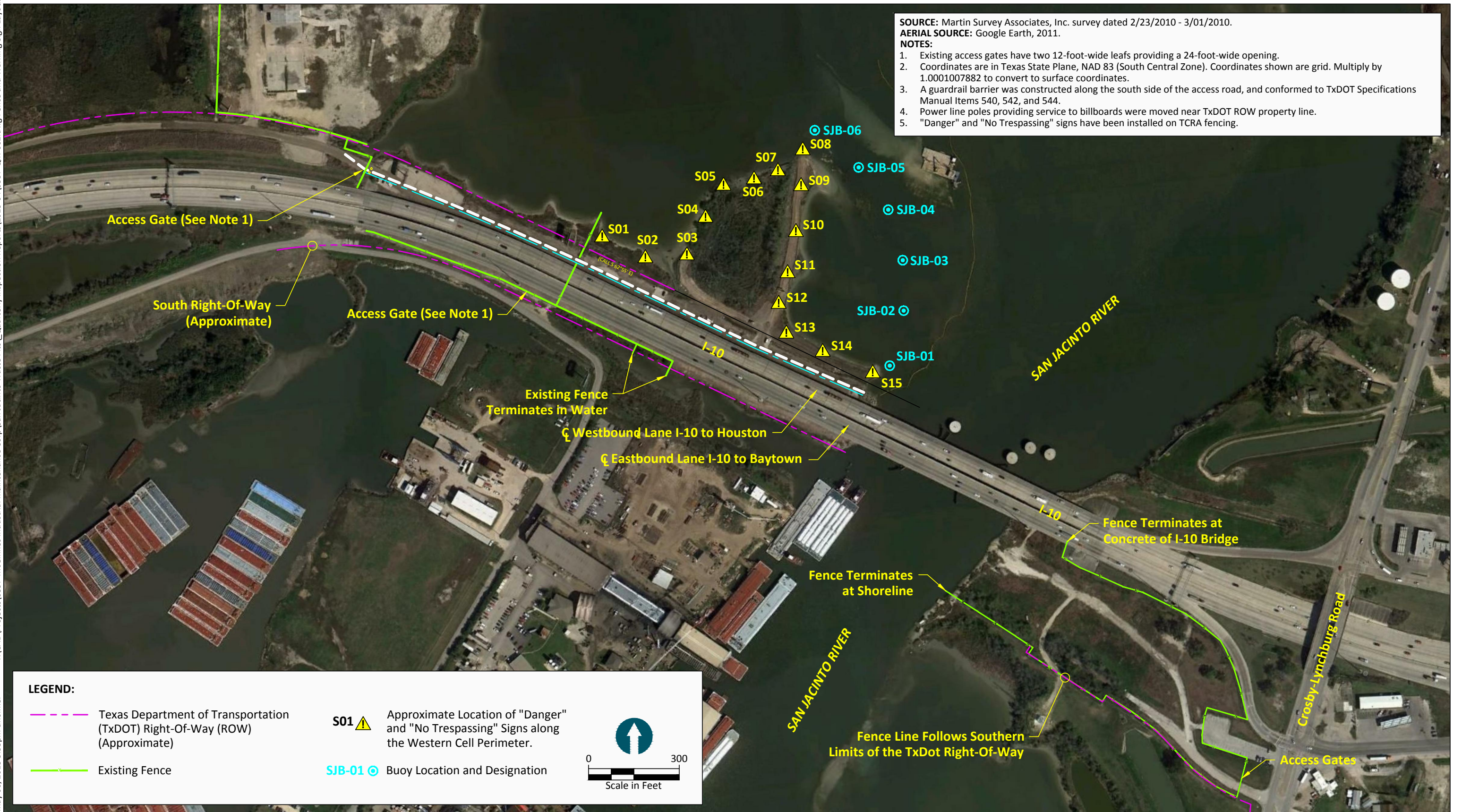


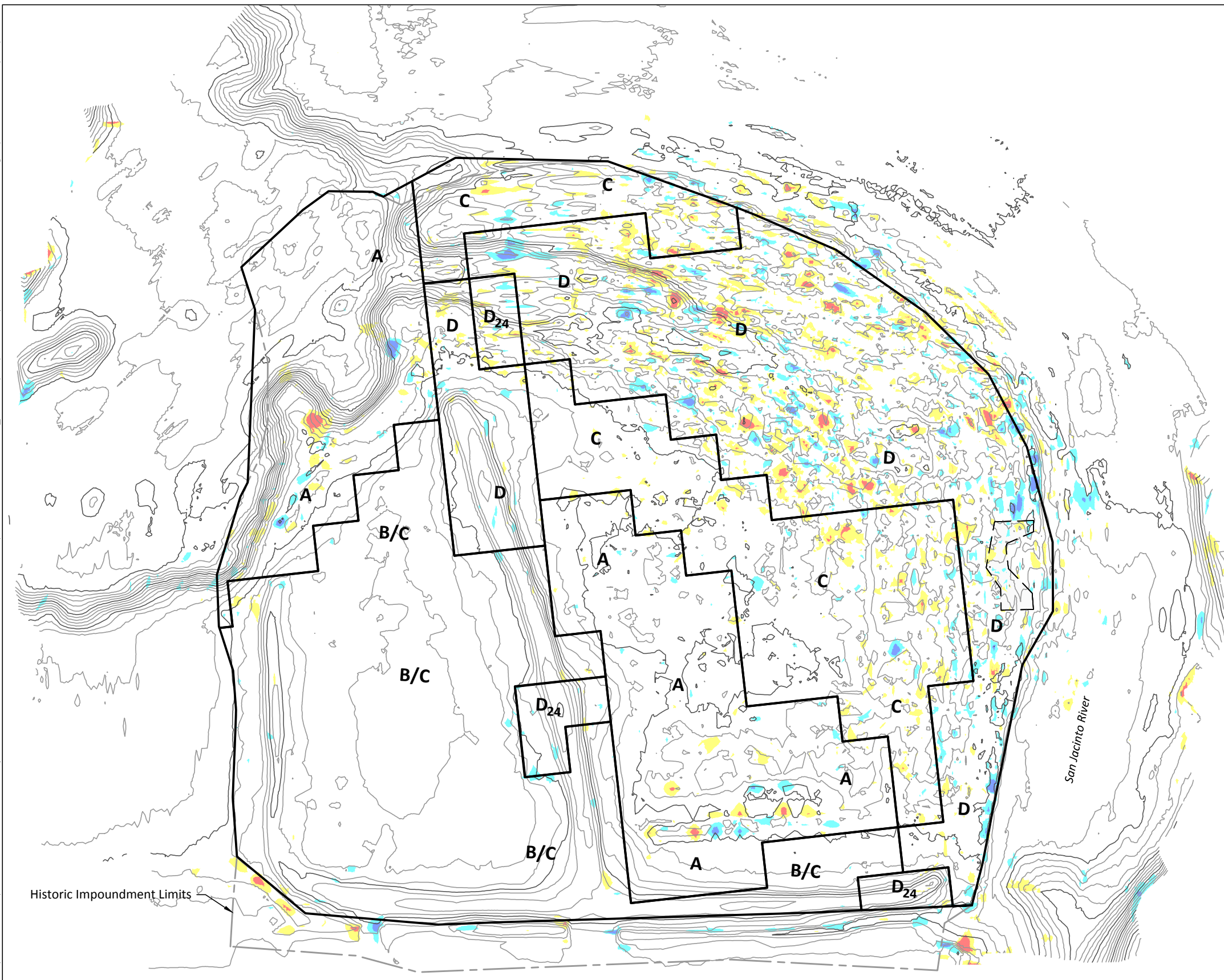
Figure 1

Vicinity Map

Post TCRA Quarterly Inspection (April 2013)
San Jacinto River Waste Pits Superfund Site

T:\CAD\Projects\0557-McGinnes Industrial Maintenance Corp\San Jacinto Waste Pits\Quarterly Inspection Reports\2013-04\0557-QIR-002.dwg Fence and Warning Sign Layout
May 06, 2013 3:35pm dholmer





LEGEND:

April 2013 Bathymetric and Topographic Contours (1 Foot Interval)

B/C Armored Cap Type and Boundary

Historic Impoundment Limits

> 1.0 Foot Increase

0.5 Foot Increase to 1.0 Foot Increase

0.5 Foot Increase to 0.5 Foot Decrease

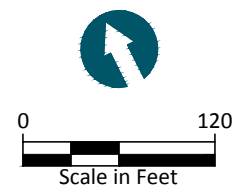
0.5 Foot Decrease to 1.0 Foot Decrease

> 1.0 Foot Decrease

Example 30'x30' Area

Visual Survey Only in January 2013.
Comparison is to the October 2012 survey

SOURCE: Drawing prepared from surveys provided by Hydrographic Consultants dated January/February 2013 and April 2013.
HORIZONTAL DATUM: Texas State Plane South Central, NAD83, U.S. Feet.
VERTICAL DATUM: NAVD 88.



APPENDIX A

INSPECTION PHOTOGRAPHIC LOG



Photo 01: Western Cell from the central berm area (view southwest)



Photo 02: Vegetation and signage along southern and central berm (view northwest)



Photo 03: Eastern face of central berm as viewed from the intersection of the central and southern berms (view north)



Photo 04: Central berm as viewed from eastern cell (view north)



Photo 05: Vegetation on northern end of the Eastern Cell and warning buoy (view northeast)



Photo 06: Northern edge of Western Cell submerged during high tide (view southwest)



Photo 07: Northern interior portion of Western Cell with biological growth in submerged areas (view southwest)



Photo 08: Northern interior portion of Western Cell that is submerged due to high tide (view north)



Photo 09: Southern end of the western berm (view south)



Photo 10: Additional lower supports and barb along perimeter fencing on west bank south of I-10 (view south)



Photo 11: Warning signs along perimeter fencing on west bank south of I-10 (view northeast)



Photo 12: Fish consumption advisory signs on west bank south of I-10 (view south)



Photo 13: Warning signs along perimeter fencing on west bank south of I-10 (view north)



Photo 14: South fence line, west bank interior of the site (view west)



Photo 15: South fence line, west bank interior of the site (view east)



Photo 16: Warning sign on east bank of the San Jacinto River, south of I-10 (view west southwest)



Photo 17: Daisy chain sign and warning sign on access gate to east bank south of I-10 (view southwest)



Photo 18: No signs people living under I-10 bridge west of San Jacinto River (view southwest)



Photo 19: No signs of people living under I-10 bridge east of San Jacinto River (view east)



Photo 20: USEPA Public Notice sign located outside the access gate north of I-10 (view east)